Claims:

1. A method for screening a compound that is able to suppress aberrant immune activity, the method comprising the steps of:

(a) administering a compound to be screened to a non-human transgenic animal that has been modified to express human FcγRIIa receptor such that the transgenic animal is susceptible to an autoimmune disease; and

(b) assessing the transgenic animal to determine if the compound reduces aberrant immune activity in the animal.

2. A method for screening a compound that is able to suppress an autoimmune disease, the method comprising the steps of:

(a) administering a compound to be screened to a non-human transgenic animal that has been modified to express human FcγRIIa receptor such that the transgenic animal is susceptible to an autoimmune disease; and

(b) assessing the transgenic animal to determine if the compound reduces aberrant immune activity in the animal.

3. A method for screening a compound that is able to suppress an autoimmune disease, the method comprising the steps of:

(a) administering a compound to be screened to a non-human cell expressing human FcγRIIa receptor, wherein the cell is derived from a non-human transgenic animal that has been modified to express human FcγRIIa receptor such that the transgenic animal is susceptible to an autoimmune disease; and

(b) assessing the cell to determine if the compound reduces aberrant immune activity in the cell.

4. A method according to any one of claims 1 to 3, wherein the compound reduces aberrant immune activity selected from the group consisting of aberrant immune complex formation, aberrant immune complex clearance and immune complex induced inflammation.

5. A method according to claim 1 or 2, wherein the method includes the additional step of:

(c) assessing the transgenic animal to determine if the compound reduces immune complex induced inflammation.

6. A method according to any one of claims 1 to 5, wherein the non-human transgenic animal is resistant to collagen-induced arthritis prior to being modified to express the human FcγRIIa receptor.

7. A method according to any one of claims 1 to 6, wherein the non-human transgenic animal is a transgenic mouse derived from the strains C57BL/6 and SJL that has been modified to express human FcγRIIa receptor.

8. A method according to any one of claims 1 to 7, wherein the compound reduces aberrant immune activity in the animal by inhibiting the activity of FcγRIIa expressed in the animal.

9. A method according to any one of claims 1, 2 and 4 to 8, wherein in step (b) the aberrant immune activity is assessed in terms of clinical symptoms and / or pathological features of an autoimmune disease.

10. A method according to any one of claims 1 to 9, wherein the autoimmune disease is selected from the group consisting of arthritis and systemic lupus erythematosus (SLE).

11. A method according to any one of claims 1 to 10, wherein the autoimmune disease is rheumatoid arthritis (RA).

12. A method according to any one of claims 1 to 10, wherein the autoimmune disease is collagen-induced arthritis (CIA).

13. A compound that can reduce aberrant immune activity in a cell or animal when identified by the method according to any one of claims 1 to 12.

14. A method of treating or preventing an autoimmune disease in a subject, the method comprising administering an effective amount of a compound that can reduce aberrant immune activity in the subject, wherein the compound is identified by the method according to any one of claims 1 to 12.

15. A method according to claim 14, wherein the compound can reduce aberrant immune complex formation, aberrant immune complex clearance or immune complex induced inflammation in a subject.

16. A method according to claim 14, wherein the compound can reduce aberrant immune activity in the cell by inhibiting the activity of FcγRIIa expressed in the subject.

17. A method according to any one of claims 14 to 16, wherein the autoimmune disease is caused by aberrant immune complex formation, aberrant immune complex clearance or immune complex induced inflammation.

18. A method according to any one of claims 14 to 17, wherein the autoimmune disease is selected from the group consisting of arthritis and systemic lupus erythematosus (SLE).

19. A method according to any one of claims 14 to 18, wherein the autoimmune disease is rheumatoid arthritis (RA).

20. A method according any one of claims 14 to 18, wherein the autoimmune disease is collagen-induced arthritis (CIA).

21. A composition for treating or preventing an autoimmune disease, the composition comprising an effective amount of a compound that can reduce aberrant immune activity in an animal, and a pharmaceutically acceptable diluent, excipient or carrier, wherein the compound is identified by the method according to any one of claims 1 to 12.

22. A composition according to claim 21, wherein the compound can reduce aberrant immune complex formation, aberrant immune complex clearance or immune complex induced inflammation in an animal.

23. A composition according to claim 21 or 22 , wherein the compound can reduce aberrant immune activity in the animal by inhibiting the activity of FcγRIIa expressed in a cell of the animal.

24. A composition according to any one of claims 21 to 23, wherein the autoimmune disease is caused by aberrant immune complex formation, aberrant immune complex clearance or immune complex induced inflammation.

25. A composition according to any one of claims 21 to 24, wherein the autoimmune disease is selected from the group consisting of arthritis and systemic lupus erythematosus (SLE).

26. A composition according to any one of claims 21 to 25, wherein the autoimmune disease is rheumatoid arthritis (RA).

27. A composition according any one of claims 21 to 25, wherein the autoimmune disease is collagen-induced arthritis (CIA).

28. A non-human transgenic animal that has been modified to express human FcγRIIa receptor such that the transgenic animal is susceptible to an autoimmune disease, wherein the transgenic animal is resistant to collagen-induced arthritis prior to being modified to express the human FcγRIIa receptor.

29. A non-human transgenic animal according to claim 28, wherein the transgenic animal is a mouse.

30. A non-human transgenic animal according to claim 29, wherein the transgenic derived from the strains C57BL/6 and SJL that has been modified to express human FcγRIIa receptor.

31. A non-human transgenic animal according to any one of claims 28 to 30, wherein the autoimmune disease is caused by aberrant immune complex formation, aberrant immune complex clearance or immune complex induced inflammation.

32. A non-human transgenic animal according to any one of claims 28 to 31, wherein the autoimmune disease is selected from the group consisting of arthritis and systemic lupus erythematosus (SLE).

33. A non-human transgenic animal according to any one of claims 28 to 32, wherein the autoimmune disease is rheumatoid arthritis (RA).

34. A non-human transgenic animal according to any one of claims 28 to 33, wherein the autoimmune disease is collagen-induced arthritis (CIA).

35. A method of producing a non-human transgenic animal model for autoimmune disease, the method comprising the steps of:

(a) introducing a nucleic acid molecule encoding human FcγRIIa receptor to a cell of a non-human embryo;

(b) transferring the embryo to a foster mother; and

(c) assessing the resultant born animal for susceptibility to autoimmune disease;

wherein the non-human transgenic embryo is resistant to collagen-induced arthritis prior to the introduction of a nucleic acid molecule encoding a human FcγRIIa receptor.

36. A method according to claim 35, wherein the transgenic animal is a mouse.

37. A method according to claim 35 or 36, wherein the transgenic animal is a transgenic mouse derived from the strains C57BL/6 and SJL that has been modified to express human FcγRIIa receptor.

38. A method according to any one of claims 35 to 37, wherein the autoimmune disease is caused by aberrant immune complex formation, immune complex clearance or immune complex induced inflammation.

39. A method according to any one of claims 35 to 38, wherein the autoimmune disease is selected from the group consisting of arthritis and systemic lupus erythematosus (SLE).

40. A method according to any one of claims 35 to 39, wherein the autoimmune disease is rheumatoid arthritis (RA).

41 A method according to any one of claims 35 to 39, wherein the autoimmune disease is collagen-induced arthritis (CIA).

42. A method for producing a composition for treating or preventing an autoimmune disease, the method comprising

(a) selecting the compound by the method according to any one of claims 1 to 12; and

(b) formulating the compound with a pharmaceutically acceptable diluent, excipient or carrier to produce the composition.